

Sub 503
47. The peptide of claim 46, wherein the peptide (a) includes anchor positions for binding to alleles of MHC class II molecules DR3 or DR4.

Sub 25
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48. The peptide of claim 46, wherein the peptide comprises
(a) a peptide of at least 6 amino acids of an amino acid sequence selected from the group consisting of SEQ ID NO: 2 and SEQ ID NO: 3, or
(b) a peptide or peptide derivative having a length of 6 to 25 amino acids which exhibits a specificity or/and affinity which is essentially equivalent to that of the peptide (a) and includes anchor positions for binding to alleles of MHC class II molecules DR3 or DR4.

49. The peptide of claim 46, wherein the peptide has a length of at least 8 amino acids.

50. The peptide of claim 46, wherein the peptide has a length of at least 10 amino acids.

51. The peptide of claim 46, wherein the peptide carries a marker group.

52. A pharmaceutical composition, comprising a peptide as claimed in claim 46, in combination with a pharmaceutically acceptable carrier.

53. The pharmaceutical composition of claim 52, further comprising an accessory stimulating component.

54. The pharmaceutical composition of claim 53, wherein the accessory stimulating component is a cytokine, surface antigen B7, or both.

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55. A method of treating or preventing an autoimmune disease in a patient in need of such treatment or prevention, comprising administering to the patient a disease-treating or disease-preventing, respectively, effective amount of a peptide as claimed in claim 46.

56. A method of treating or preventing diabetes in a patient in need of such treatment or prevention, comprising administering to the patient a disease-treating or disease-preventing, respectively, effective amount of a peptide as claimed in claim 46.

57. The method of claim 56, wherein the peptide includes anchor positions for binding to alleles of MHC class II molecules DR3 or DR4.